

## Abstract

A pulse generator circuit comprises a DC power supply (power supply voltage =  $V$ ); a transformer series connected across the DC power supply; and a single switch; wherein an output is derived from the two ends of a secondary winding of the transformer. While the switch is on-state, a pulse of negative polarity is outputted from the two ends of the secondary winding. When the switch is turned off, a discharging to a resistive load is commenced and an induced electromotive force occurring in the transformer causes the output voltage to abruptly rise, thereby outputting a pulse of positive polarity.